

64K EXPANDER

MEMORY
FOR ATARI 600XL

OWNER'S MANUAL

CAUTION!!!

This memory board requires that 3 wires be soldered. If you are not experienced in soldering, do not attempt to install this product. A 20-30 watt soldering iron is recommended. Soldering irons that exceed 30 watts must be of the temperature control type (preferably not to exceed 650 degrees). Under no circumstances should a soldering iron be used that exceeds 60 watts.

INTRODUCTION

The 600XL is one of the most powerful computers on the market. Memory is the only thing it lacks to become equal to the 800XL. With your new MOSAIC Expander board, you will gain that power.

The MOSAIC Expander fits snugly inside your computer. It does not use the expansion connector on the back. Therefore, you will still be able to plug on other options as your needs grow.

MOSAIC is dedicated to producing affordable and useful expansion products. With the MOSAIC Expander, you will be able to use your computer to its full potential.

INSTALLATION

There are 5 basic steps necessary to install the MOSAIC Expander.

- A. Remove top pieces
- B. Move IC chips onto Expander board.
- C. Solder wires.
- D. Plug on Expander board.
- E. Replace top pieces.

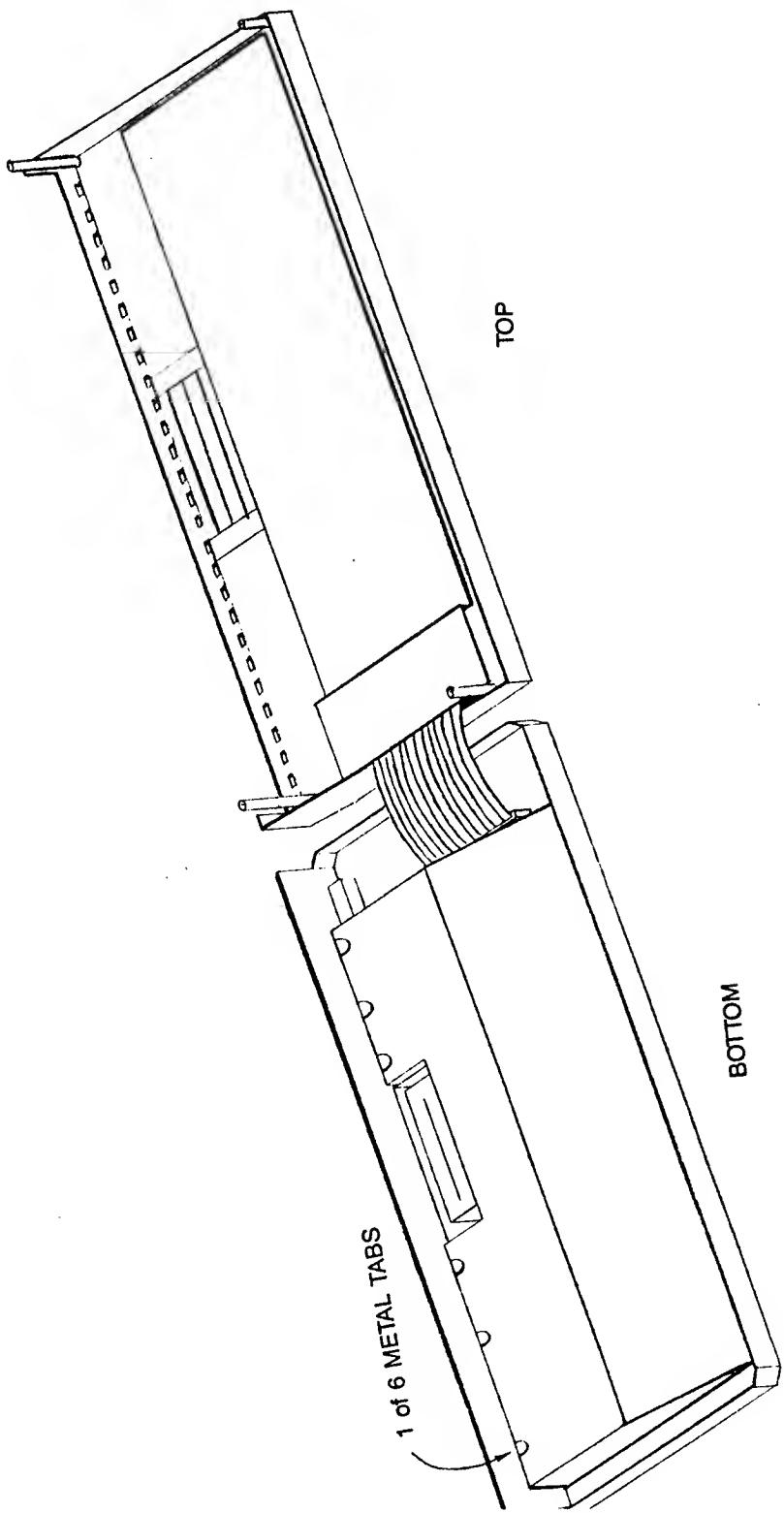
The details for each step follow.

A. REMOVE TOP PIECES.

1. Unplug all cables and ROM cartridge.
2. Turn computer upside down and remove 4 screws.
3. Turn computer right side up.
4. Slightly lift left side of "top piece."
5. Without unplugging the keyboard connector, carefully lift "top piece" to the right so that the top and bottom are laying side by side.

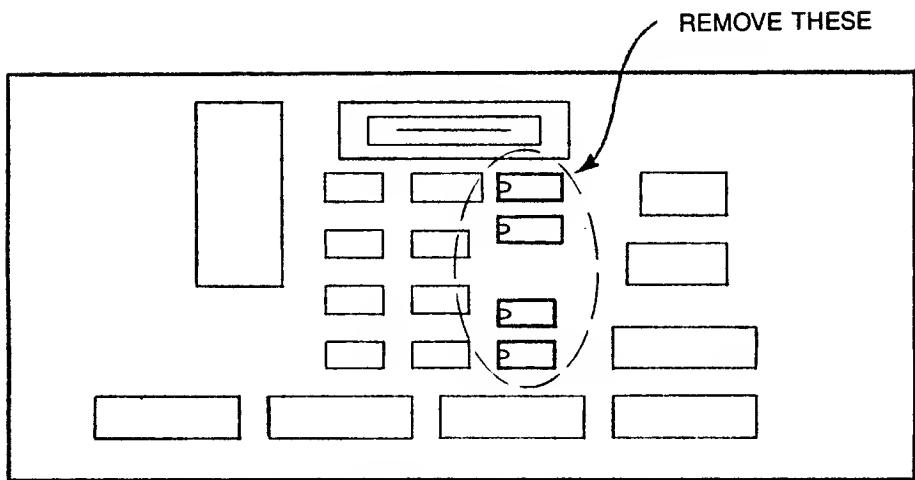
Caution: The keyboard cable is very fragile. If it should accidentally come unplugged, wait until it is time to reassemble the computer, and then carefully insert the cable into its connector.

6. Straighten the 6 metal tabs across the top rear of the metal shield.
7. Note which screws are missing from around the perimeter of the metal shield.
8. Remove screws and nuts from metal shield.
9. Lift metal shield.



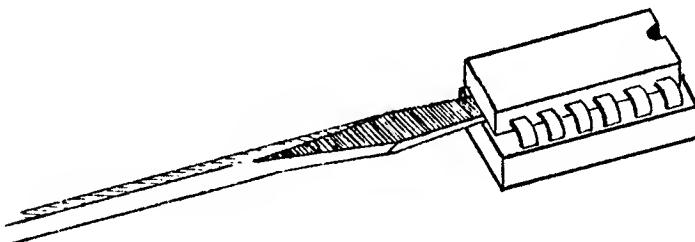
B. MOVE IC CHIPS ONTO EXPANDER BOARD.

1. Locate U5 and U6 on the computer board. They should have an IC chip with the number 74LS158 installed in them.



COMPUTER BOARD

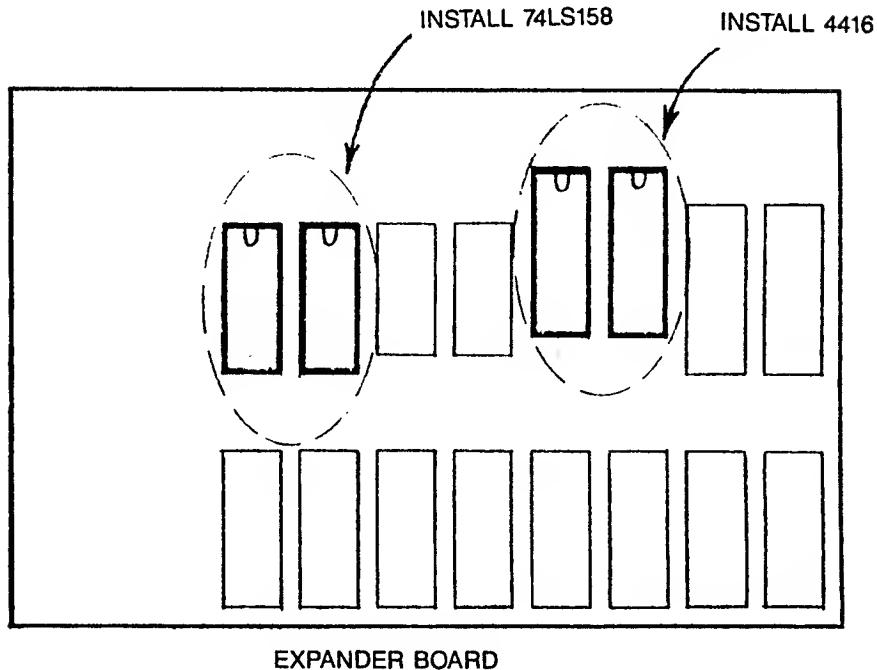
2. Using a flat blade screw driver, carefully remove U5 and U6 so that no pins are bent. The black IC socket should remain in place.



USE FLAT BLADE SCREW DRIVER

3. Install the 74LS158's into the sockets of the Expander board in the upper left corner of the board.

Caution: Note that one end of the IC chip has an indentation. Be sure the indentation is pointed toward the top of the board. Be careful not to bend any pins.



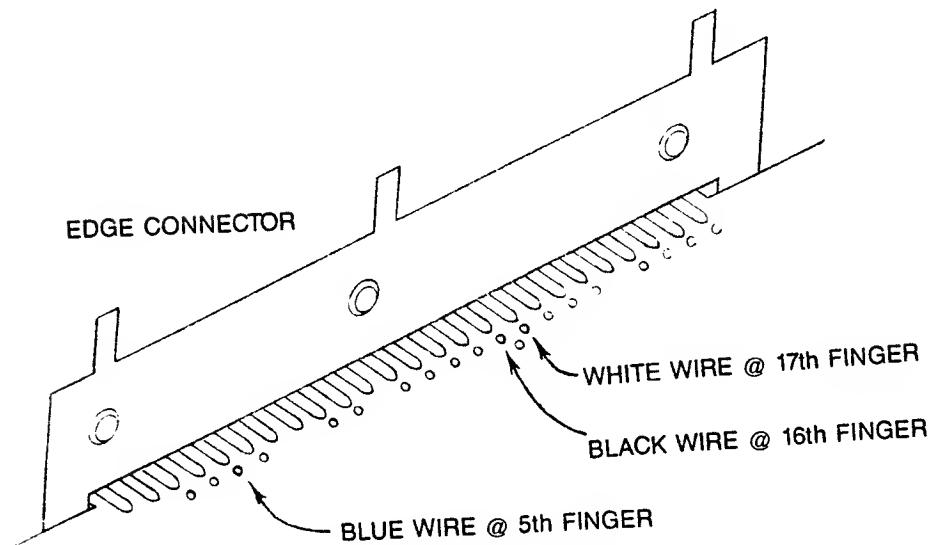
4. Locate U11 and U12 on the computer board. They should have an IC chip with the number 4416 installed in them.

5. Carefully remove U11 and U12 so that no pins are bent.

6. Install the 4416's into the sockets of the Expander labeled "Your RAM's". Be sure the indentation is pointed toward the top of the board. Be sure not to bend any pins.

C. SOLDER WIRES.

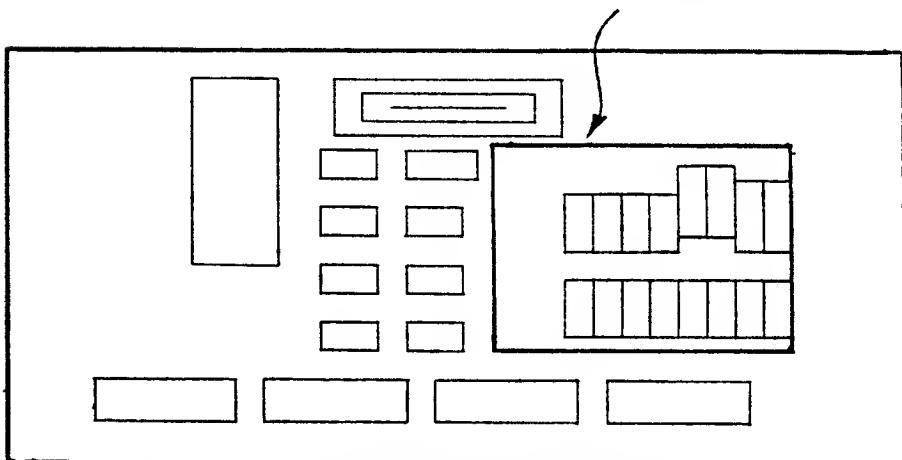
1. Locate the expansion connector at the back of the computer board. Note that there are 25 gold fingers across one side. Note also that most of the fingers have a solder hole near them. You will be soldering wires into these holes. In the following steps, count the fingers, starting on the left as seen from the front of the computer.
2. Solder the BLUE wire into the hole behind the 5th finger from the left.
3. Solder the BLACK wire into the hole behind the 16th finger from the left.
4. Solder the WHITE wire into the hole behind the 17th finger from the left.



D. PLUG ON EXPANDER BOARD.

1. Note that on the blank side of the Expander board there are several pins. These pins must plug into the sockets of the computer board where you removed the IC chips.
2. Carefully line up the pins so that they exactly match the socket holes. Be sure the left pins line up with the left holes of each socket.
3. Carefully press the Expander board into place. Make sure all pins are fully seated. Be sure not to bend any pins.

PLUG IN EXPANDER BOARD



COMPUTER BOARD WITH EXPANDER

E. REPLACE TOP PIECES.

1. Carefully replace top pieces in the reverse order in which they were removed.
2. Now you can plug in your cables and ROM cartridge and take advantage of all your new computer power!

F. TEST

To test, disconnect all disk drives and peripherals. Turn on computer with BASIC. Type;

PRINT FRE(0) [Press Return]

The computer should respond with 37902.

Cut Here and Mail

**MOSAIC 64K EXPANDER FOR 600XL
90-DAY GUARANTEE**

If the 64K Expander should ever fail to operate properly within 90 days from the date of purchase, ship it to the factory and MOSAIC will either repair or replace it free!

NAME _____

ADDRESS _____

PURCHASE DATE _____ SER. NO. _____

PLACE OF PURCHASE _____



P.O. Box 708
Oregon City, Oregon 97045
(503) 655-9574

 **MOSAIC**
ELECTRONICS

P.O. Box 708
Oregon City, Oregon 97045